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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,422	08/14/2003	Nicola Chong-White	021318-002500US	9868

20350 7590 02/15/2008  
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EXAMINER
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RIDER, JUSTIN W

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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02/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/642,422	Applicant(s) CHONG-WHITE ET AL.	
	Examiner Justin W. Rider	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 41-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 66-76 is/are allowed.
- 6) ☒ Claim(s) 41 is/are rejected.
- 7) ☒ Claim(s) 42-65 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ( <u>1 Sheet</u> ). | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. In response to the Office Action mailed 07 November 2007, applicant submitted a response filed 14 January 2008.

***Double Patenting***

2. The examiner has withdrawn the Double Patenting rejection with regard to co-pending application 10/660,468 for reasons stated in applicants remarks dated 14 January 2008.

***Information Disclosure Statement***

3. The information disclosure statement(s) (IDS) submitted on 14 January 2008 complies with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement(s).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 41 is rejected under 35 U.S.C. 102(e) as being anticipated by **Tsuchinaga et al.** (US Patent No. 7,092,875) referred to as **Tsuchinaga** hereinafter.

**Claim 41:** **Tsuchinaga** discloses a transcoding apparatus for performing frame classification (Fig. 1, **52**: FRAME-TYPE DETECTOR) and rate determination (It is inherent that a transcoding system must be aware of both the incoming and outgoing rates to be able to process the bitstream using the appropriate components within a particular CELP-based encoding scheme (e.g. AMR or G.729A).) on a source bitstream (Input signal  $x_{in}$ ), without reconstructing a voice signal (col. 12, lines 65-67, '*without first being decoded to a decoded signal*',), comprising:

i. a source bitstream unpacker [demultiplexer] associated with the source codec, the source bitstream unpacker being operative to generate one or more parameters (col. 20, line 50 - col. 21, line 22 discloses the determination and demultiplexing of plural parameters (e.g. LSP code, pitch lag, algebraic and gain codes));

ii. a buffer coupled to the source bitstream unpacker and operative to store one or more frame classification and rate determination parameters (Fig. 6, **83**: LSP Buffer; and col. 17, lines 11-16); and

iii. a frame classification and rate determination module coupled to the source bitstream unpacker and the buffer, the frame classification and rate determination module being operative to output a frame class (Fig. 1, wherein the Frame-Type Detector (**52**) outputs the frame type to the Transcoding Controller (**53**) in order to properly control the transcoding process.) and a rate (Inherent as mentioned above) for the destination voice codec (e.g. G 729A or AMR) through the use of one or more parameters associated with the source bitstream coded in the source voice codec and free from the use of a voice signal (It uses the Transcoding Controller (**53**)).

*Allowable Subject Matter*

6. Claims 66-76 are allowed.

Claims 42-65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 42-76 are directed toward a method for classifying frames and determining coding rates for use in a destination codec within a transcoding process; all of which is done without decoding or reconstructing the input voice signal. **Gao and Zinser, Jr.** make coding rate and frame class decisions based on an input analog signal, which appears to be a precursor to the language in question in the current claimed invention. **Tsuchinaga** fails to specifically disclose one or more unquantizer modules coupled to the code separator, the one or more unquantizer modules operative to unquantize the one or more indices to provide one or more compression parameters associated the source voice codec and a classifier input parameter selector coupled to the one or more unquantizer modules, the classifier input parameter selector operative to determine which compression parameters will be used in a classification process. The current claim 66 also deals with a set of intermediate parameters, which are also associated with previous frames within an input bitstream.

Additionally, claims 42-65 recite the use of unquantizers and code separators in conjunction with the above in order to further make rate and frame classification determinations based on intermediate voice data.

These features are used in order to train as well as implement features within a transcoding scheme that applies a smart frame and rate classifier, which also serves to reduce

computational complexity due to the ability to exploit the relationship of available parameters to perform both tasks efficiently.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin W. Rider whose telephone number is (571) 270-1068. The examiner can normally be reached on Monday - Friday 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J.W.R.  
05 February 2008

  
**DAVID HUDSPETH**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**